

**AMENDMENTS TO THE CLAIMS WITH MARKINGS TO SHOW CHANGES MADE,  
AND LISTING OF ALL CLAIMS WITH PROPER IDENTIFIERS**

1. (Canceled)
2. (Currently amended) The apparatus as claimed in claim 9, ~~further comprising at least one~~ wherein the receiver is configured to detect ~~which detects~~ three time-dependent magnetic field components.
3. (Currently amended) The apparatus as claimed in claim 9, further comprising an evaluation unit for determining from the variable magnetic field component at least one parameter selected from the group consisting of position, direction of the instrument axis, and roll angle of the instrument.
- 4-6. (Canceled)
7. (Previously Presented) The apparatus as claimed in claim 9, wherein the drive is an electrical drive.
8. (Previously Presented) The apparatus as claimed in claim 9, wherein the drive is a hydraulic drive using liquid to drive the magnet.
9. (Currently amended) An apparatus for ~~location of~~ locating an instrument, comprising:  
at least one magnet disposed inside a body of ~~operably attached to~~ the instrument, the at least one magnet being rotatable independently of a rotation of the body of the instrument and adapted to produce a moving magnetic field extending outside the body of the instrument to generate a magnetic moment which is perpendicular to an axis of the instrument;

a drive for rotating the at least one magnet independent of the body of the instrument shaft;

variation means for varying the magnetic field generated by the at least one magnet outside the body of the instrument, thereby creating a variable magnetic field component which relates to a roll angle of the instrument; and

a receiver measuring unit for measuring the variable magnetic field component representative of to determine the roll angle of the instrument.

10. (Previously presented) The apparatus as claimed in claim 9, further comprising means for providing a reproducible deflection of the magnet from its rotation axis.
11. (Previously presented) The apparatus as claimed in claim 9, further comprising a coupling which temporarily interrupts the rotation of the magnet.
12. (Previously presented) The apparatus as claimed in claim 9, wherein the magnet is composed of magnet elements that move with respect to one another and whose elements are shifted by a driver at a specific roll angle.
13. (Previously Presented) The apparatus as claimed in claim 9, wherein the instrument has a member selected from the group consisting of drill, cutting or impact apparatus, at least one needle, and at least one set of forceps.
14. (Previously Presented) The apparatus as claimed in claim 9, wherein the instrument has at least one opening for ejection of a liquid.
15. (Previously Presented) The apparatus as claimed in claim 9, wherein the instrument has an apparatus for production/emission of light beams, laser beams, radioactive beams, sound waves or ultrasound waves.

16. (Previously Presented) The apparatus as claimed in claim 9, wherein the instrument has an apparatus for recording optical images or ultrasound images.
17. (Previously Presented) The apparatus as claimed in claim 9, wherein the instrument has an apparatus for emission of electrical pulses or for recording electrical data.
18. (Currently amended) The apparatus as claimed in claim 9, further comprising two or more transmitters and/or additional receivers for processing signals commensurate with a position of the instrument at different points.
19. (Previously Presented) The apparatus as claimed in claim 18, wherein each transmitter is constructed as a permanent magnet and/or electromagnet and configured for a transmitter identification by different frequencies, amplitudes and/or by the production of different analog or digital values.
20. (Currently amended) The apparatus as claimed in claim 9, further comprising a frequency modulation ~~and/or amplitude modulation for~~ varying ~~variation of~~ the magnetic field generated by the magnet.
21. (Previously Presented) The apparatus as claimed in claim 9, further comprising a gradual shielding of the magnet.
- 22.-25 (Canceled)
26. (Currently amended) A method of determining ~~[[the]]~~ a location of an instrument, comprising the steps of:
  - rotating at least one magnet ~~disposed inside a body of~~ in an area of the instrument independent of a rotation of the instrument to produce a magnetic

field to generate a magnetic moment outside the body of the instrument perpendicular to an axis of the instrument;

detecting three time-dependent magnetic field components of the magnetic field; and

modulating a frequency of the rotation for variation of the magnetic field generated by the magnet to minimize the influence of a disturbing external magnetic field or to distinguish the magnetic field from another magnetic field.

27.-30. (Canceled)

31. (Currently amended) A method of determining ~~[[the]]~~ a location of an instrument, comprising the steps of:

producing a magnetic field by a rotating magnet inside a body of the instrument independent of a rotation of the body of the instrument to generate a magnetic moment perpendicular to an axis of the instrument, with the magnet configured as a transmitter ~~and connected to the instrument~~;

detecting with a receiver three time-dependent magnetic field components produced by the rotating magnet outside the body of the instrument ~~by a receiver~~; and

modulating a frequency of the rotation for variation of the magnetic field generated by the magnet to minimize the influence of a disturbing external magnetic field or to distinguish the magnetic field from another magnetic field.

32. (Canceled)